FOURTH QUARTER 1996 PROGRESS REPORT
L.E. CARPENTER SITE
WHARTON, NEW JERSEY

March 1997

Work Order No.: 06720-018-003-0004

Prepared on behalf of

L.E. CARPENTER AND COMPANY

For the

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

Prepared by:

ROY F. WESTON, INC.
Raritan Plaza III, Suite 2B
101 Fieldcrest Ave
Edison, NJ 08837-3622

WESTON

TABLE OF CONTENTS

TABLE OF CONTENTS (CONTINUED)

APPENDIX A

LIST OF FIGURES

APPENDIX B

LIST OF TABLES

LIST OF APPENDICES

WESTON

SECTION 1.0

INTRODUCTION AND SCOPE

L.E. Carpenter and Company (L.E. Carpenter) is pleased to submit this Quarterly Monitoring Report for the former manufacturing facility located at 170 North Main Street, Borough of Wharton, Morris County, New Jersey. This report provides a summary of field activities performed at the site during the period of October 1996 through December 1996, and presents measurements and results obtained during the Fourth Quarter 1996 groundwater monitoring event. The quarterly monitoring events are performed at the site to comply with Paragraph 35 of the 1986 Administrative Consent Order issued by New Jersey Department of Environmental Protection (NJDEP) to L.E. Carpenter. Results from this sampling event have been used to update the existing groundwater database for the shallow and intermediate aquifer zones beneath the site.

Section 1.0 of this report presents an introduction, the monitoring activities conducted, and the procedures followed during this reporting period. Section 2.0 presents the results of the quarterly groundwater sampling. Section 3.0 discusses the results and findings of the activities conducted. The figures, tables, monitoring well sampling data forms, and the analytical summary sheets are presented in Appendix A, B, C, and D, respectively.

1.1 GROUNDWATER MONITORING ACTIVITIES

On 12 December 1996, Roy F. Weston, Inc. (WESTON®) personnel performed the quarterly sampling of seven groundwater monitoring wells at the L.E. Carpenter site. Quarterly groundwater levels and product thickness measurements were collected on 13 December 1996. The groundwater samples collected were analyzed for select volatile organic compounds that include benzene, toluene, ethylbenzene, and total xylenes (BTEX) and bis(2-ethylhexyl)phthalate (DEHP) utilizing United States Environmental Protection Agency (EPA) Methods 602 and 625, respectively, in accordance with WESTON's letter correspondence to NJDEP detailing the revised quarterly sampling monitoring dated 7 June 1995. Table 1 in Appendix B lists the monitoring wells and sampling parameters for the Fourth Quarter event.

1.2 WATER LEVEL AND PRODUCT THICKNESS MEASUREMENTS

One round of water level and product thickness measurements were collected from the study area's monitoring wells, well points, and staff gauges on 13 December 1996. These measurements were collected approximately one week after the "passive" product recovery system was temporarily removed from service in order to assess static conditions. Figure 1 (Appendix A) presents the locations of all on-site monitoring points. Water levels were measured in all of the existing monitoring points. Surface water level measurements were also collected at seven staff

gauges, and at the RP-1 and RP-4 measurement points marked on the wall adjacent to the Rockaway River and Washington Forge Pond, respectively

Water level and product thickness measurements were obtained using either a calibrated oil/water interface probe or an electronic water level indicator. In order to validate the thickness of the product measured with the oil/water interface probe, product thicknesses were also determined in select monitoring points by recovering the product column in a transparent, bottom-flap bailer and measuring its thickness with a tape measure. Table 2 (Appendix B) presents a summary of the product thicknesses measured with both the bailer and the probe. All downhole equipment was decontaminated between monitoring points.

1.3 GROUNDWATER SAMPLING

On 12 December 1996, groundwater samples were collected from seven on-site monitoring wells as part of the revised quarterly sampling program, which was initiated during the second quarter 1995 sampling event. The scope of the revised quarterly groundwater sampling event was presented in WESTON's letter correspondence to the NJDEP dated 7 June 1995. Envirotech Research, Inc., a NJDEP certified laboratory, was utilized for sample bottle preparation and sample analyses.

1.3.1 General Groundwater Sampling Procedures

Groundwater samples were collected in accordance with protocols provided in the NJDEP's Field Sampling Procedures Manual (May, 1992). Each well was purged of three to five well volumes of groundwater prior to sampling utilizing either a laboratory decontaminated teflon bailer, a well wizard pump (MW-25), or a peristaltic pump (MW-22). The laboratory decontaminated teflon bailers were attached to a dedicated decontaminated teflon coated stainless steel leader.

During the well purging procedures, field measurements (temperature, specific conductivity, pH, and milli-volts) were obtained using a calibrated YSI 3560 Water Quality Monitoring System. A calibration check was conducted on 12 December prior to sampling to identify the instrument's accuracy. A minimum of two readings (initial and final) were collected during the purge procedures. These data are presented on the monitoring well sampling forms located in Appendix C.

Groundwater samples were collected upon completion of well purging. Teflon bailers were used to collect the sample from wells MW-4, MW-14I, MW-15S, MW-15I, and MW-17S. The bailers were lowered slowly into the well to avoid aeration of the groundwater sample, retrieved, and then the sample was transferred into the laboratory provided sample bottles. The samples from MW-22 and MW-25 were transferred directly from the pump tubing into the sample bottles. All samples were labeled and placed in a laboratory cooler on ice at 4°C. The samples were transported to the laboratory within 24 hours of collection.

A field blank was collected at a frequency of one field blank per day of groundwater sampling, as required by NJDEP's Field Sampling Procedures Manual dated May, 1992. Field blanks were obtained by pouring laboratory provided analyte-free water over a laboratory decontaminated teflon bailer. A laboratory prepared trip blank was transported with the samples and analyzed for BTEX parameters by EPA Method 602.

A duplicate sample was collected at a frequency of 5 percent of the total number of groundwater samples collected per analyte throughout the sampling event. As per the 5% frequency, one duplicate sample, which was designated as MW-15I (duplicate of MW-15I), was collected during the sampling event.

1.4 PRODUCT RECOVERY

The enhanced "passive" product recovery system was in service for most of the fourth quarter. The system was returned to operation on 19 September 1996, subsequent to the aquifer testing perfomed at the site. The system was temporarily shut down for one week in order to conduct the quarterly monitoring and assess static aquifer conditions. Skimmer pumps are present and operating in MW-3, MW-10, MW-11S, and WP-B4 to recover product.

During the fourth quarter, product was removed from several wells and well points by manual bailing. All recovered product was containerized in the above ground storage tank located adjacent to the recovery system shed in the middle of the site. Manual bailing was performed on a weekly basis throughout the fourth quarter. The total volume of product that was manually bailed during the reporting period was approximately 27 gallons. This was in addition to a amount of product which was collected by the "passive" recovery system during its operation. Approximately 184 gallons of product has been recovered during 1996.

Product recovery by the "passive" system was limited by the volume of product present in the monitoring points. As identified during a review of historical trends, the apparent thickness of product in monitoring points is usually less when water levels are near their seasonal high as they were during a significant portion of the fourth quarter.

SECTION 2.0

RESULTS

2.1 GROUNDWATER ELEVATION DATA

Groundwater elevation data for the 13 December 1996 measurement event are presented in Table 3 (Appendix B). Equipotential maps for the shallow and intermediate aquifer zones are presented in Appendix A. Water table depression in the monitoring points, caused by the presence of Light Non-Aqueous Phase Liquid (LNAPL), was corrected for using the method presented in previous quarterly reports (WESTON, April 1992). This formula is the following:

(Static Depth to Water) - (Apparent Product Thickness x Specific Gravity) = Corrected Depth to Water

At monitoring points where field specific gravity tests have been performed, the results were used in the correction of water level elevations. A summary of the field determined specific gravity results were presented in WESTON's Third Quarter 1995 Progress Report (October 1995), and are included as Table 4 in Appendix B of this report.

2.2 ANALYTICAL RESULTS

A summary of the analytical results for the BTEX and DEHP analysis of groundwater samples collected from the wells are presented in Table 5 and Table 6 in Appendix B. Copies of the summary pages from the analytical data packages are provided in Appendix D. Copies of the full data packages will be provided at the project's conclusion in the Remedial Action Report.

WESTON

SECTION 3.0

DISCUSSION

In order to further define the hydrogeological conditions at the site, data generated during field investigative activities conducted during this quarter were evaluated. The groundwater elevation and product thickness measurements collected on 13 December 1996, analytical data obtained, and field observations made during this most recent groundwater sampling event were compared to, and evaluated within the context of the existing database.

3.1 GROUNDWATER ELEVATION AND PRODUCT THICKNESS MEASUREMENTS

Corrected water level elevations were within the historic range of water levels collected during the fourth quarter. A comparison of these data with Third Quarter 1996 data identified a pronounced upward trend in the water level elevations in selected monitoring points. Sixty-three (63) measuring points had upward fluctuations which ranged between 0.11 foot at RP-02 and 7.02 at MW-11I. Three (3) measuring points had downward fluctuations in corrected groundwater elevations which ranged between 0.31 foot at MW-20 to 1.86 feet at MW-8.

Equipotential maps of the shallow and intermediate aquifer zones were constructed based on the results of the 13 December 1996 monitoring event. The maps for the shallow and intermediate aquifer zones are presented as Figure 2 and Figure 3 (Appendix A), respectively. Groundwater flow in the shallow aquifer zone is similar to preceding quarterly events. A pronounced groundwater mound in the vicinity of MW-6R was noted during the Third Quarter. Groundwater level data collected during this quarter did not indicate the presence of a groundwater mound. Therefore, it's presence during the Third Quarter can be attributed to short term conditions. Groundwater flow direction and gradient in the intermediate aquifer zone was similar to preceding events.

3.2 PRODUCT DELINEATION

Product delineation was performed by measuring product thickness for each monitoring point. At each location where product was encountered, its thickness was measured using an oil/water interface probe, to one hundredth (0.01) of a foot.

Product was encountered in eighteen (18) of the monitoring points. There was no general trend of increase or decrease in apparent product thickness in the monitoring points during the 13 December monitoring event as compared to the Third Quarter 1996. Twelve (12) monitoring points had an increase in their apparent product thicknesses, while eight (8) monitoring points exhibited a decrease in thickness. The greatest apparent product thickness decrease was 2.98 feet

in MW-11S, and the greatest increase was 3.37 feet in WP-A6. An isopach map of apparent product thickness measured with the calibrated oil/water interface probe is provided as Figure 4 (Appendix A). The thickest layer of product identified during the 13 December measurement event was 3.37 feet of product in WP-A6. The product footprint remained similar to the Third Quarter 1996 event; however, a slight increase in apparent product thickness was indicated in the south central portion of the site, near well points, WP-A1 and WP-A6. In addition, a decrease in apparent product thickness was indicated in the middle portion of the sight, near well point, WP-B4.

Evaluation of product thickness measurements determined by the probe and the bailing measurement method indicate slight differences between the two measurement techniques. Table 2 presents the measured difference results between the two methods of product recovery. The most significant difference (2.95 feet) between the two techniques was identified at well point, WP-A4. The difference in measurements is attributed to the product adhering to the probe's sensors.

3.3 GROUNDWATER SAMPLING ANALYTICAL RESULTS

Analytical data concerning the distribution of BTEX compounds and DEHP were compiled as part of the quarterly groundwater sampling effort. The analytical results were compared to the NJDEP Class IIA Groundwater Quality Standards (GWQS) and Discharge Criteria presented in the Record of Decision (ROD) dated 20 April 1994.

The comparison indicated that only xylenes (total) were detected at concentrations above the relevant criteria. During the fourth quarter, xylenes (total) were detected above the GWQS of 40 micrograms per liter (ug/L) in one location (MW-22) at a concentration of 1,330 ug/L. Table 5 presents the BTEX analytical results for the fourth quarter.

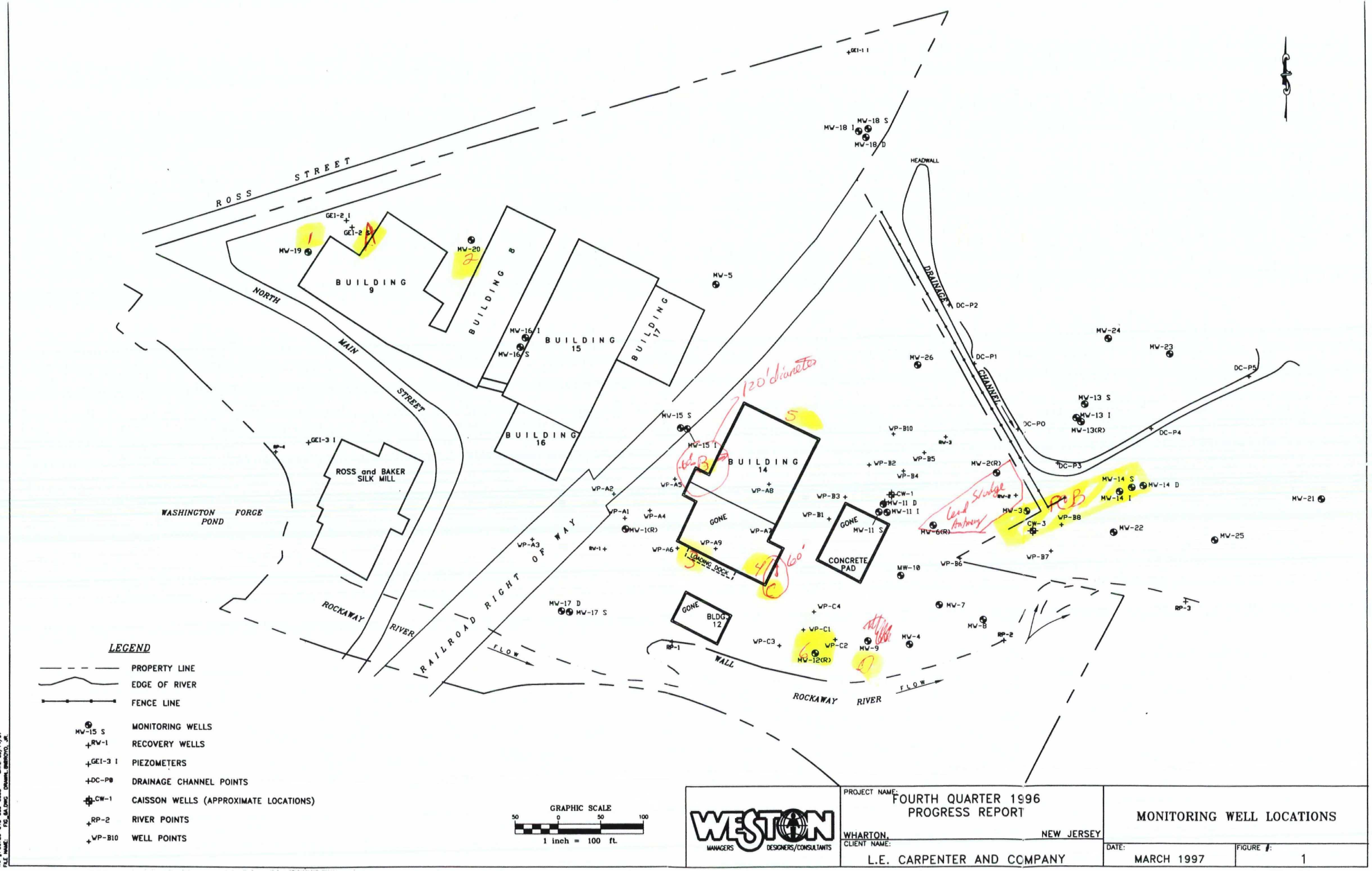
MW-22 fourth quarter analytical results were evaluated with respect to the three preceding sampling events in which MW-22 was sampled (Fourth Quarter 1995, Second Quarter 1996, and Third Quarter 1996). In all three sampling events, xylenes (total) have been detected at concentrations in excess of the site-established criteria. Ethylbenzene was also detected at concentrations above the site-established criteria (above the ROD established Dishcharge Criterion, but below the GWQS) in one of the three sampling events (Third Quarter 1996).

Groundwater samples were also analyzed for DEHP in the Fourth Quarter 1996 sampling event. Results indicate that DEHP was detected at concentrations above the relevant GWQS in one sample collected from the shallow aquifer zone. DEHP was detected in MW-4 at a concentration above the 30 ug/L GWQS (11,000 ug/L). Table 6 provides the analytical results of the DEHP analysis.

The sample collected from MW-4 was analyzed for DEHP and evaluated with respect to Fourth Quarter 1995 and Second Quarter 1996 sampling results. These two preceding sampling events, during which samples were analyzed for DEHP, indicated DEHP sample concentrations above the relevant GWQS.

APPENDIX A

FIGURES


ROSS STREET
NORTH MAIN STREET
BUILDING 9
BUILDING 8
BUILDING 15
BUILDING 17
BUILDING 16
BUILDING 14
BLDG. 12
GONE
CONCRETE PAD
LOADING DOCK
ROSS and BAKER SILK MILL
WASHINGTON FORGE POND
ROCKAWAY RIVER
RAILROAD RIGHT OF WAY
DRAINAGE CHANNEL
HEADWALL
WALL
FLOW
MW-19
GEI-2 I
GEI-2 S
MW-20
MW-5
MW-16 I
MW-16 S
MW-18 S
MW-18 I
MW-18 D
GEI-1 I
GEI-3 I
MW-15 S
MW-15 I
MW-1(R)
MW-17 D
MW-17 S
MW-12(R)
MW-9
MW-4
MW-7
MW-8
MW-10
MW-11 D
MW-11 I
MW-11 S
MW-2(R)
MW-6(R)
MW-3
MW-13 S
MW-13 I
MW-13(R)
MW-14 S
MW-14 I
MW-14 D
MW-21
MW-22
MW-23
MW-24
MW-25
MW-26
CW-1
CW-3
WP-A1
WP-A2
WP-A3
WP-A4
WP-A5
WP-A6
WP-A7
WP-A8
WP-A9
WP-B1
WP-B2
WP-B3
WP-B4
WP-B5
WP-B6
WP-B7
WP-B8
WP-B10
WP-C1
WP-C2
WP-C3
WP-C4
RW-1
DC-P0
DC-P1
DC-P2
DC-P3
DC-P4
DC-P5
RP-1
RP-2
RP-3
120' diameter
60'
Lead Sludge Antimony
PCB
LEGEND
PROPERTY LINE
EDGE OF RIVER
FENCE LINE
MW-15 S MONITORING WELLS
RW-1 RECOVERY WELLS
GEI-3 I PIEZOMETERS
DC-P0 DRAINAGE CHANNEL POINTS
CW-1 CAISSON WELLS (APPROXIMATE LOCATIONS)
RP-2 RIVER POINTS
WP-B10 WELL POINTS
GRAPHIC SCALE
50 0 50 100
1 inch = 100 ft.
WO #: 06720-018-003-0003 DATE: 03/14/97
FILE NAME: FIG_6A.DWG DRAWN: BARROYO, JR.
WESTON
MANAGERS DESIGNERS/CONSULTANTS
PROJECT NAME: FOURTH QUARTER 1996 PROGRESS REPORT
WHARTON, NEW JERSEY
CLIENT NAME: L.E. CARPENTER AND COMPANY
MONITORING WELL LOCATIONS
DATE: MARCH 1997
FIGURE #: 1

ROSS STREET

NORTH MAIN STREET

BUILDING 9

BUILDING 8

BUILDING 15

BUILDING 16

BUILDING 17

BUILDING 14

ROSS and BAKER SILK MILL

WASHINGTON FORCE POND

ROCKAWAY RIVER

RAILROAD RIGHT OF WAY

GONE BLDG. 12

GONE CONCRETE PAD

LOADING DOCK

DRAINAGE CHANNEL

HEADWALL

WALL

FLOW

GE1-1 I

GE1-2 I

GE1-2 S (628.58)

GE1-3 I

MW-19 (628.71)

MW-20

MW-5 (627.62)

MW-16 I

MW-16 S (628.84)

MW-15 S (626.59)

MW-15 I (627.81)

(626.67) MW-18 S

MW-18 I

MW-18 D

(627.08)

MW-24

MW-23 (628.44)

MW-26 (626.94)

DC-P1 (624.78)

DC-P2 (624.62)

DC-P5 (624.78)

DC-P0 (624.76)

DC-P4 (624.80)

DC-P3 (624.80)

MW-13 S (627.53)

MW-13 I

MW-13(R)

MW-14 S (625.71)

MW-14 I

MW-14 D

MW-21

MW-22

MW-25

MW-2(R) (626.84)

MW-3

CW-3 (626.93)

WP-B10

WP-B2 (627.35)

WP-B4

WP-B5

WP-B8

WP-B7

WP-B6 (627.58)

MW-6(R) (627.89)

MW-10

MW-7

MW-4

MW-8 (626.66)

RP-2 (626.34)

RP-3 (625.16)

WP-A2 (627.65)

WP-A1 (627.56)

WP-A4

WP-A5

WP-A8

WP-A7 (627.52)

WP-A9

WP-A6

MW-1(R)

(626.07) WP-A3

WP-B3

WP-B1

(627.60) CW-1

MW-11 D

MW-11 I

MW-11 S

MW-17

MW-17 S (628.12)

WP-C4 (627.88)

WP-C1

WP-C2

WP-C3 (627.59)

MW-9 (627.44)

MW-12(R) (627.43)

RP-1 (627.86)

(640.33)

627 628 629 630 635 640 625 626

LEGEND

- PROPERTY LINE
- EDGE OF RIVER
- FENCE LINE
- MW-15 S — MONITORING WELLS
- RW-1 — RECOVERY WELLS
- GE1-3 I — PIEZOMETERS
- DC-P0 — DRAINAGE CHANNEL POINTS
- CW-1 — CAISSON WELLS (APPROXIMATE LOCATIONS)
- RP-2 — RIVER POINTS
- WP-B10 — WELL POINTS
- 626 ——— 626 — GROUNDWATER CONTOUR ELEVATION (INTERVAL AS SHOWN)
- (640.33) — CORRECTED WATER LEVEL AT MONITORING POINT (FEET ABOVE M.S.L)

GRAPHIC SCALE
50 0 50 100
1 inch = 100 ft.

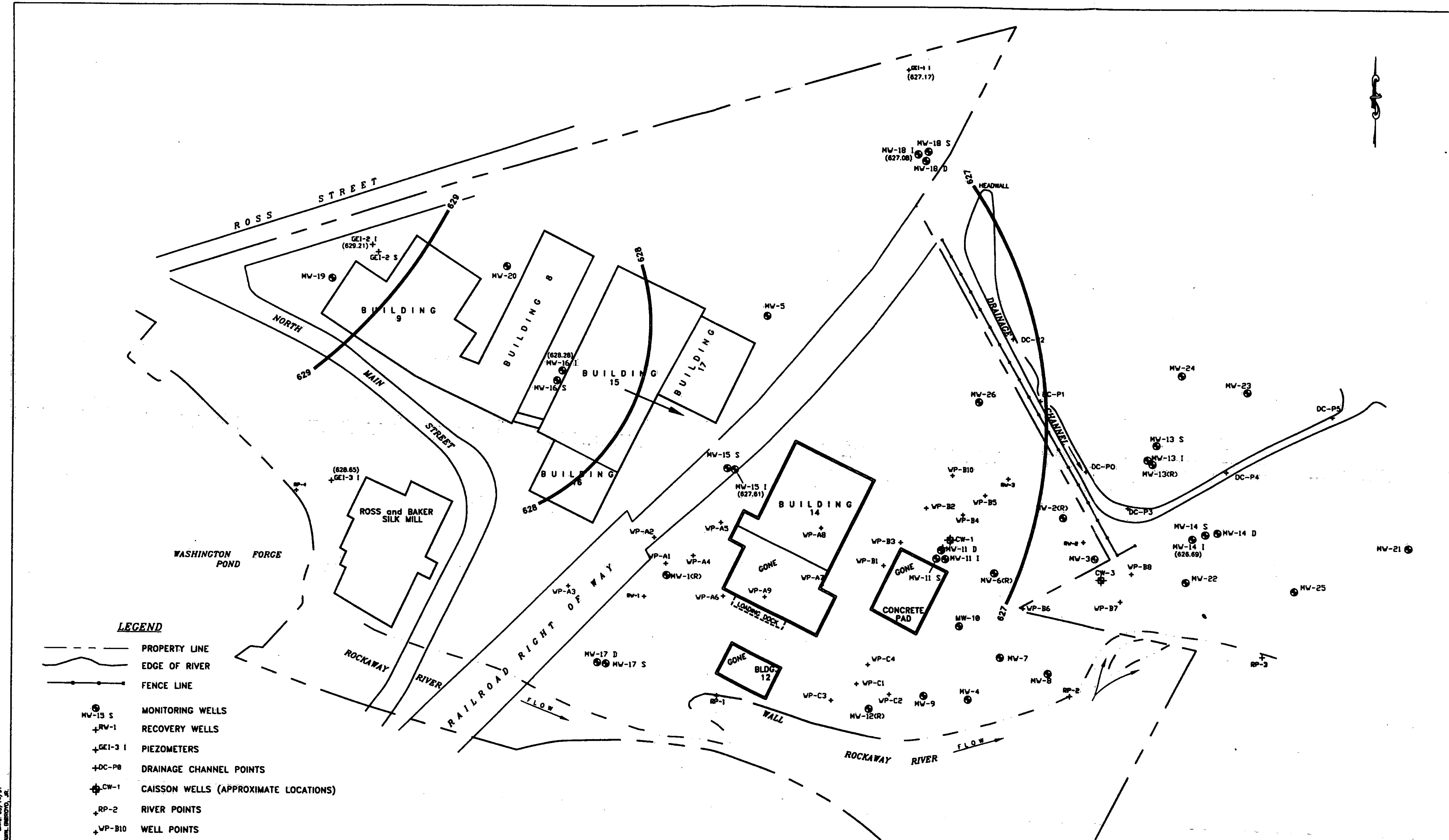
WESTON MANAGERS DESIGNERS/CONSULTANTS

PROJECT NAME: FOURTH QUARTER 1996 PROGRESS REPORT
WHARTON, NEW JERSEY
CLIENT NAME: L.E. CARPENTER AND COMPANY

EQUIPOTENTIAL MAP OF SHALLOW AQUIFER ZONE MEASURED ON 12/13/96

DATE: MARCH 1997
FIGURE #: 2

WO #: 06720-018-003-0003 DATE: 03/17/97
FILE NAME: FIG-2-A3.DWG DRAWN: CHECKED:


ROSS STREET
NORTH MAIN STREET
BUILDING 9
BUILDING 8
BUILDING 15
BUILDING 17
BUILDING 16
BUILDING 14
BLDG. 12
GONE
CONCRETE PAD
LOADING DOCK
ROSS and BAKER SILK MILL
WASHINGTON FORGE POND
RAILROAD RIGHT OF WAY
ROCKAWAY RIVER
FLOW
WALL
DRAINAGE CHANNEL
HEADWALL
629
628
627
(627.17)
GEI-2 I
(629.21)
GEI-2 S
MW-19
MW-20
MW-5
(628.28)
MW-16 I
MW-16 S
MW-18 I
(627.08)
MW-18 S
MW-18 D
(628.65)
GEI-3 I
RP-4
MW-15 S
MW-15 I
(627.61)
WP-A1
WP-A2
WP-A3
WP-A4
WP-A5
WP-A6
WP-A7
WP-A8
WP-A9
RW-1
MW-1(R)
MW-17 D
MW-17 S
RP-1
WP-B1
WP-B2
WP-B3
WP-B4
WP-B5
WP-B6
WP-B7
WP-B8
WP-B10
CW-1
MW-11 D
MW-11 I
MW-11 S
MW-10
MW-6(R)
MW-2(R)
MW-3
CW-3
MW-26
MW-24
MW-23
MW-13 S
MW-13 I
MW-13(R)
MW-14 S
MW-14 D
MW-14 I
(626.69)
MW-21
MW-22
MW-25
DC-P0
DC-P1
DC-P2
DC-P3
DC-P4
DC-P5
WP-C1
WP-C2
WP-C3
WP-C4
MW-12(R)
MW-9
MW-4
MW-7
MW-8
RP-2
RP-3
LEGEND
PROPERTY LINE
EDGE OF RIVER
FENCE LINE
MW-15 S MONITORING WELLS
RW-1 RECOVERY WELLS
GEI-3 I PIEZOMETERS
DC-P8 DRAINAGE CHANNEL POINTS
CW-1 CAISSON WELLS (APPROXIMATE LOCATIONS)
RP-2 RIVER POINTS
WP-B10 WELL POINTS
626 626 GROUNDWATER CONTOUR ELEVATION (1 FOOT INTERVAL)
(628.65) CORRECTED WATER LEVEL AT MONITORING POINT (FEET ABOVE M.S.L)
GRAPHIC SCALE
50 0 50 100
1 inch = 100 ft.
#: 06720-018-003-0003 DATE: 03/14/97
NAME: FIG-6-A1.DWG DRAWN: EMBROYO, JR.

WESTON
MANAGERS DESIGNERS/CONSULTANTS

PROJECT NAME: FOURTH QUARTER 1996 PROGRESS REPORT

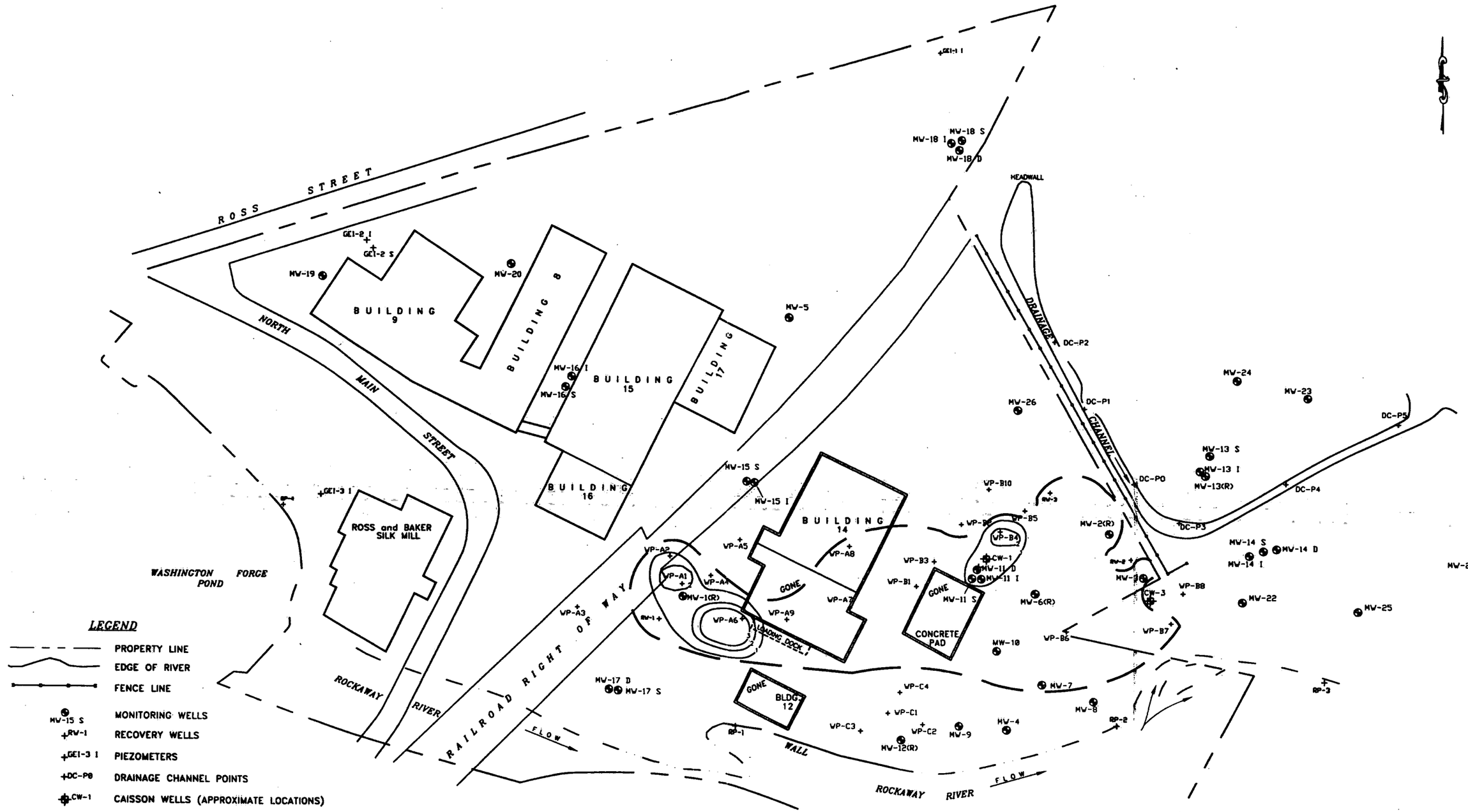
WHARTON, NEW JERSEY

CLIENT NAME:

EQUIPOTENTIAL MAP OF INTERMEDIATE AQUIFER ZONE MEASURED ON 12/13/96

DATE:

FIGURE 7



LEGEND

- PROPERTY LINE
- EDGE OF RIVER
- FENCE LINE
- MW-15 S — MONITORING WELLS
- RW-1 — RECOVERY WELLS
- GE1-3 I — PIEZOMETERS
- DC-P0 — DRAINAGE CHANNEL POINTS
- CW-1 — CAISSON WELLS (APPROXIMATE LOCATIONS)
- RP-2 — RIVER POINTS
- WP-B10 — WELL POINTS
- EXTENT OF PRODUCT
- 1 — APPARENT PRODUCT THICKNESS (CONTOUR INTERVAL = 1.0 FOOT)

GRAPHIC SCALE
50 0 50 100
1 inch = 100 ft.

WESTON MANAGERS DESIGNERS/CONSULTANTS

PROJECT NAME: FOURTH QUARTER 1996 PROGRESS REPORT
WHARTON, NEW JERSEY
CLIENT NAME: L.E. CARPENTER AND COMPANY

ISOPACH MAP OF PRODUCT THICKNESS MEASURED ON 12/13/96

DATE: MARCH 1997
FIGURE #: 4

WO #: 06720-018-003-0003 DATE: 03/17/97
FILE NAME: FIG-6-AB.DWG DRAWN: DIBIDOTO, JR.

APPENDIX B

TABLES

TABLE 1
Fourth Quarter Sample Summary
L.E. Carpenter Site
Wharton, NJ

Well	Parameters
MW-4	BTEX, DEHP
MW-15I	BTEX, DEHP
MW-15I (DUP)	BTEX, DEHP
MW-15S	BTEX, DEHP
MW-14I	BTEX, DEHP
MW-22	BTEX, DEHP
MW-25	BTEX, DEHP
MW-17S	BTEX, DEHP
FB01	BTEX, DEHP
TRIP BLANK	BTEX, DEHP

Notes:

- BTEX = benzene, toluene, ethylbenzene, and xylenes (total).
- DEHP = bis(2-Ethylhexyl) phthalate.
- FB01 is a field blank.

TABLE 2
FOURTH QUARTER
PRODUCT THICKNESS COMPARISON:
OIL/WATER PROBE VS. BOTTOM-FLAP BAILER
L.E. CARPENTER SITE
WHARTON, NJ

Well Number	Probe Measurement	Bailer Measurement	Difference
MW-1R	1.99'	1.0'	0.99'
RW-1	0.24'	0.04'	0.2'
WP-A1	2.71'	1.3'	1.41'
WP-A4	4.45'	1.5'	2.95'
WP-A6	3.37'	1.0'	2.37'
WP-A7	0.08'	0.03'	0.05'
WP-A8	0.04'	0.08'	0.04'
WP-A9	0.24'	0.1'	0.14'

TABLE 3
WATER LEVEL/PRODUCT THICKNESS MEASUREMENT DATA
DECEMBER 13, 1996
L.E. CARPENTER SITE
WHARTON, NEW JERSEY

MONITORING POINT DESIGNATION	MEASURING POINT ELEVATION (FT. MSL)	DEPTH TO PRODUCT (FT)	APPARENT PRODUCT THICKNESS (FT)	STATIC DEPTH TO WATER (FT)	CORRECTED DEPTH TO WATER (FT)	CORRECTED WATER LEVEL ELEVATION (FT MSL)
MW-1(R)	635.47	7.63	1.72	9.35	7.80	627.67
MW-2(R)	632.14	SHEEN	SHEEN	5.30	5.30	626.84
MW-3	632.56	5.51	0.08	5.59	5.52	627.04
MW-4	632.50	NONE	NONE	5.20	5.20	627.30
MW-5	632.42	NONE	NONE	4.80	4.80	627.62
MW-6(R)	632.42	4.53	0.05	4.58	4.54	627.89
MW-7	630.68	SHEEN	SHEEN	4.05	4.05	626.63
MW-8	630.56	NONE	NONE	3.90	3.90	626.66
MW-9	631.69	NONE	NONE	4.25	4.25	627.44
MW-10	631.52	5.93	0.37	6.30	5.97	625.55
MW-11S	632.96	5.99	1.66	7.65	6.11	626.85
MW-11I	632.82	NONE	NONE	0.57	0.57	632.25
MW-11D	632.42	NONE	NONE	1.93	1.93	630.49
MW-12R	634.33	NONE	NONE	6.90	6.90	627.43
MW-13S	631.23	NONE	NONE	3.70	3.70	627.53
MW-13(R)	630.59	NONE	NONE	3.87	3.87	626.72
MW-13I	630.66	NONE	NONE	2.80	2.80	627.86
MW-14S	628.41	NONE	NONE	2.70	2.70	625.71
MW-14I	628.23	NONE	NONE	1.54	1.54	626.69
MW-14D	628.53	NONE	NONE	ARTESIAN	ARTESIAN	ARTESIAN
MW-15S	636.77	NONE	NONE	9.18	9.18	627.59
MW-15I	636.66	NONE	NONE	9.05	9.05	627.61
MW-16S	634.47	NONE	NONE	5.63	5.63	628.84
MW-16I	634.96	NONE	NONE	6.68	6.68	628.28
MW-17S	634.79	NONE	NONE	6.69	6.69	628.10
MW-17D	634.86	NONE	NONE	6.82	6.82	628.04
MW-18S	631.26	NONE	NONE	4.59	4.59	626.67
MW-18I	631.04	NONE	NONE	3.96	3.96	627.08
MW-18D	630.77	NONE	NONE	0.99	0.99	629.78
MW-19	638.88	NONE	NONE	10.17	10.17	628.71
MW-20	636.77	NONE	NONE	6.63	6.63	630.14
MW-21	628.80	NONE	NONE	2.52	2.52	626.28
MW-22	628.74	CASING	IS	OBSTRUCTED	CASING	OBSTRUCTED
MW-23	630.64	NONE	NONE	2.20	2.20	628.44
MW-24	629.03	CASING	IS	OBSTRUCTED	CASING	OBSTRUCTED
MW-25	627.33	CASING	IS	OBSTRUCTED	CASING	OBSTRUCTED
MW-26	633.26	NONE	NONE	6.32	6.32	626.94
RW-1	637.38	9.61	0.24	9.85	9.64	627.74
RW-2	631.68	NONE	NONE	4.89	4.89	626.79
RW-3	631.99	SHEEN	SHEEN	5.03	5.03	626.96
CW-1	634.35	NONE	NONE	6.75	6.75	627.60
CW-3	633.30	NONE	NONE	6.38	6.38	626.92
GEI-1I	630.78	NONE	NONE	3.61	3.61	627.17

TABLE 3
WATER LEVEL/PRODUCT THICKNESS MEASUREMENT DATA
DECEMBER 13, 1996
L.E. CARPENTER SITE
WHARTON, NEW JERSEY

MONITORING POINT DESIGNATION	MEASURING POINT ELEVATION (FT. MSL)	DEPTH TO PRODUCT (FT)	APPARENT PRODUCT THICKNESS (FT)	STATIC DEPTH TO WATER (FT)	CORRECTED DEPTH TO WATER (FT)	CORRECTED WATER LEVEL ELEVATION (FT MSL)
GEI-2S	637.67	NONE	NONE	9.09	9.09	628.58
GEI-2I	638.20	NONE	NONE	8.99	8.99	629.21
GEI-3I	639.85	NONE	NONE	11.20	11.20	628.65
WP-A1	635.81	7.87	2.71	10.58	8.25	627.56
WP-A2	639.19	NONE	NONE	11.54	11.54	627.65
WP-A3	635.56	NONE	NONE	7.49	7.49	628.07
WP-A4	DISREPAIR	DISREPAIR	DISREPAIR	DISREPAIR	DISREPAIR	DISREPAIR
WP-A5	637.85	NONE	NONE	9.93	9.93	627.92
WP-A6	637.28	9.61	3.37	12.98	9.81	627.47
WP-A7	634.88	7.36	0.08	7.44	7.36	627.52
WP-A8	637.56	10.16	0.04	10.20	10.16	627.40
WP-A9	639.32	11.36	0.24	11.60	11.36	627.96
WP-B1	633.65	SHEEN	SHEEN	4.21	4.21	629.44
WP-B2	632.25	NONE	NONE	4.90	4.90	627.35
WP-B3	633.33	4.77	0.01	4.78	4.77	628.56
WP-B4	632.56	5.25	2.56	7.81	5.48	627.08
WP-B5	632.11	OBSTRUCTION	AT	3.02 FEET	OBSTRUCTION	ENCOUNTERED
WP-B6	631.86	NONE	NONE	4.30	4.30	627.56
WP-B7	629.49	3.35	0.16	3.51	3.37	626.12
WP-B8	629.29	NONE	NONE	2.94	2.94	626.35
WP-B10	632.74	NONE	NONE	5.50	5.50	627.24
WP-C1	633.51	NONE	NONE	5.91	5.91	627.60
WP-C2	634.46	NONE	NONE	6.99	6.99	627.47
WP-C3	632.64	NONE	NONE	5.05	5.05	627.59
WP-C4	633.27	NONE	NONE	5.79	5.79	627.48
DC-P0	625.75	NONE	NONE	0.99	0.99	624.76
DC-P1	625.24	NONE	NONE	0.48	0.48	624.76
DC-P2	626.79	NONE	NONE	2.17	2.17	624.62
DC-P3	625.22	NONE	NONE	0.42	0.42	624.80
DC-P4	625.12	NONE	NONE	0.32	0.32	624.80
DC-P5	625.17	NONE	NONE	0.41	0.41	624.76
RP-01	629.65	NONE	NONE	1.99	1.99	627.66
RP-02	627.75	NONE	NONE	1.41	1.41	626.34
RP-03	627.11	NONE	NONE	1.95	1.95	625.16
RP-04	642.28	NONE	NONE	1.95	1.95	640.33

NOTE:
WHERE SPECIFIC GRAVITY COULD NOT BE MEASURED ASSUME A PRODUCT SPECIFIC GRAVITY OF 0.86.
FT DENOTES FEET

TABLE 4
FOURTH QUARTER
SPECIFIC GRAVITY RESULTS
L.E. CARPENTER SITE
WHATRON, NJ

MONITORING WELL	SPECIFIC GRAVITY
MW-1R	0.900
MW-3	0.920
MW-6R	0.900
MW-11S	0.930
WP-A6	0.940
WP-A7	0.940
WP-A8	0.940
WP-A9	0.980
WP-B3	0.940
WP-B4	0.910
WP-B5	0.915

NOTES:
*Specific gravity measurements could not be conducted on all product bearing wells due to insufficient quantities.
*Specific gravity was field determined.

TABLE 5
FOURTH QUARTER ANALYTICAL RESULTS
L.E. CARPENTER SITE
WHARTON, NEW JERSEY

Sample ID	NJDEP Class IIA	MW-4	MW-14I	MW-15S	MW-15I	MW-17S	MW-22	MW-25	MW-15I(DUP)	FB-01	Trip Blank
Lab Sample Number	Groundwater	71862	71860	71855	71856	71864	71858	71859	71857	71861	71863
Sampling Date	Criteria (ug/l)	12/12/96	12/12/96	12/12/96	12/12/96	12/12/96	12/12/96	12/12/96	12/12/96	12/12/96	12/12/96
Dilution Factor		1.0	1.0	1.0	1.0	1.0	50.0	1.0	1.0	1.0	1.0
Units		ug/l	ug/l	ug/l	ug/l	ug/L	ug/l	ug/l	ug/l	ug/l	ug/l
VOLATILE COMPOUNDS											
Benzene	1	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	5 U	0.10 U	0.10 U	0.10 U	0.10 U
Toluene	500(1)	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	7 U	0.14 U	0.14 U	0.14 U	0.14 U
Ethylbenzene	350(1)	2.30	0.14 U	0.21	0.14 U	0.14 U	320	0.14 U	0.14 U	0.14 U	0.14 U
Xylene(Total)	20(1)	0.50 U	0.50 U	1.70	0.50 U	0.50 U	1330	0.50 U	0.50 U	0.50 U	0.50 U
Total Confident Conc. VOAs (s)		2.30	U	1.91	U	U	1650	U	U	U	U

NOTES:
Samples analyzed by Method 602.
ug/l denotes microgram per liter.
U denotes not detected.
Shading denotes the value exceeds the NJDEP Class IIA Groundwater Criteria
(1) Discharge criteria established in the ROD

TABLE 6
FOURTH QUARTER ANALYTICAL RESULTS
L.E. CARPENTER SITE
WHARTON, NEW JERSEY

Sample ID	NJDEP Class IIA Groundwater Criteria (ug/l)	MW-4	MW-14I	MW-15S	MW-15I	MW-17S	MW-22	MW-25	MW-15I(DUP)	FB-01
Lab Sample Number		71862	71860	71855	71856	71864	71858	71859	71857	71861
Sampling Date		12/12/96	12/12/96	12/12/96	12/12/96	12/12/96	12/12/96	12/12/96	12/12/96	12/12/96
Dilution Factor		50.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Units		ug/l	ug/l	ug/l	ug/l	ug/L	ug/l	ug/l	ug/l	ug/l
SEMIVOLATILE COMPOUNDS										
bis(2-Ethylhexyl)phthalate	30	11000	2.7	1.2 U	1.7	1.5	1.2 U	1.3 U	1.9	1.2 U
Total Confident Conc. BNA		11000	2.7	1.2 U	1.7	1.5	1.2 U	1.3 U	1.9	1.2 U

NOTES:
Samples analyzed by Method 625.
ug/l denotes microgram per liter.
U denotes not detected.
Shading denotes the value exceeds the NJDEP Class IIA Groundwater Criteria

APPENDIX C

MONITORING WELL SAMPLING DATA FORMS

WESTCHEM

MONITORING WELL SAMPLING DATA FORM

Well No.: MW 155 Date: 12/12/96 Time: 0803

Boring Diameter: ~ 8" Well Casing Diameter: 4"

Annular Space Length: _____ Stickup: 1.94 Steel

COLUMN OF WATER IN WELL

Casing Length (feet): 19.60
DTW Top of Casing (feet): 9.19
Column of Water in Well (feet): 10.41

VOLUME TO BE REMOVED

Gallons per foot of casing: 0.65
Column of water length (feet): 10.41
Volume of casing (gallons): 6.8
Number of volumes to be evacuated: 3
Total volume to be evacuated (gallons): 20.3 gallons

Method of Purging (pump, bailer, etc.): Bailer (Teflon)

FIELD ANALYSIS

	Start 0.2 gallon	Mid 7	~~End~~ 14	End 21
Time	0800	0834	0847	0857
pH	6.34	7.24	7.03	6.97
Conductivity (mmHOS)	.166	.134	.171	.173
Temperature (celsius)	11.3	12.1	12.4	12.8

Total Volume Purged: 20.3 gallons

Sample Time: 9:05 Sample No.: MW-155

Parameters: BTEX, DEHP

Comments: _____

Signed/Sampler: Michelle Stensrud Date: 12/12/96

Signed/Reviewer: Michelle Stensrud Date: 12/12/96

WESTON

MONITORING WELL SAMPLING DATA FORM

Well No.: MW-15I Date: 12/12/96 Time: 0800

Boring Diameter: ~6" Well Casing Diameter: 2"

Annular Space Length: ~40' Stickup: 1.92' steel

COLUMN OF WATER IN WELL

Casing Length (feet):	40.37
DTW Top of Casing (feet):	9.08
Column of Water in Well (feet):	31.29

VOLUME TO BE REMOVED

Gallons per foot of casing:	0.167
Column of water length (feet):	31.29
Volume of casing (gallons):	5.22
Number of volumes to be evacuated:	3
Total volume to be evacuated (gallons):	15.67 ~16 gal

Method of Purging (pump, bailer, etc.): Bailer (Teflon)

FIELD ANALYSIS

	2.0 (gal) Start	6.0 Mid	12.0 ~~End~~	16.0 END
Time	0820	0830	0840	0850
pH	7.05	7.31	6.80	6.94
Conductivity (mmHOS)	.261	.254	.399	.419
Temperature (celsius)	11.4	11.5	12.7	12.9

Total Volume Purged: 16 gallons

Sample Time: 0910 Sample No.: MW15I
MW15ICDUP

Parameters: BTEX, DEHP

Comments: _____

Signed/Sampler: Michelle L. Stensrud Date: 12/12/96

Signed/Reviewer: Michelle L. Stensrud Date: 12/12/96

WESTON

MONITORING WELL SAMPLING DATA FORM

Well No.: MW-17S Date: 12/12/96 Time: 0925

Boring Diameter: _____ Well Casing Diameter: _____

Annular Space Length: _____ Stickup: _____

COLUMN OF WATER IN WELL

Casing Length (feet):	15.00
DTW Top of Casing (feet):	6.10
Column of Water in Well (feet):	8.90

VOLUME TO BE REMOVED

Gallons per foot of casing:	0.65
Column of water length (feet):	8.90
Volume of casing (gallons):	5.785
Number of volumes to be evacuated:	3
Total volume to be evacuated (gallons):	17.35 ~ 17 gal

Method of Purging (pump, bailer, etc.): Bailer (Teflon)

FIELD ANALYSIS

	3.0 (gal) Start	6.0 Mid	12.0 ~~End~~	17.0 END
Time	0925	0930	0940	0945
pH	5.90	6.13	6.55	6.55
Conductivity (nmHOS)	.134	.129	.138	.144
Temperature (celsius)	5.3	5.1	5.2	5.1

Total Volume Purged: 17 gallons

Sample Time: 0950 Sample No.: MW-17S

Parameters: BTEX, DEHP

Comments: _____

Signed/Sampler: Michelle Stensrud Date: 12/12/96

Signed/Reviewer: Michelle Stensrud Date: 12/12/96

WESTON

MONITORING WELL SAMPLING DATA FORM

Well No.: MW-22 Date: 12/12/96 Time: 1020

Boring Diameter: _____ Well Casing Diameter: _____

Annular Space Length: _____ Stickup: _____

COLUMN OF WATER IN WELL

Casing Length (feet):	11.00
DTW Top of Casing (feet):	8.00
Column of Water in Well (feet):	3.00

VOLUME TO BE REMOVED

Gallons per foot of casing:	0.167
Column of water length (feet):	3.0
Volume of casing (gallons):	—
Number of volumes to be evacuated:	3.0
Total volume to be evacuated (gallons):	9.0 gal

Method of Purging (pump, bailer, etc.): Peristaltic Pump

FIELD ANALYSIS

	2.0 gal Start	7.0 Mid	10.0 End
Time	1035	1045	1050
pH	6.59	6.92	6.95
Conductivity (nmHOS)	.553	.565	.570
Temperature (celsius)	11.2	11.5	11.3

Total Volume Purged: 10.0 gallons

Sample Time: 1120 Sample No.: MW-22

Parameters: BTEX, DEHP

Comments: Greater than 5 well volumes was purged at mw-22

Signed/Sampler: Michelle Stensrud Date: 12/12/96

Signed/Reviewer: Michelle Stensrud Date: 12/12/96

WESTON

MONITORING WELL SAMPLING DATA FORM

Well No.: MW-25 Date: 12/12/96 Time: 1040

Boring Diameter: _____ Well Casing Diameter: _____

Annular Space Length: _____ Stickup: _____

COLUMN OF WATER IN WELL

Casing Length (feet):	14.0
DTW Top of Casing (feet):	10.0
Column of Water in Well (feet):	4.0

VOLUME TO BE REMOVED

Gallons per foot of casing:	0.167
Column of water length (feet):	4.0
Volume of casing (gallons):	—
Number of volumes to be evacuated:	3.0
Total volume to be evacuated (gallons):	12 gal

Method of Purging (pump, bailer, etc.): Well Wizard

FIELD ANALYSIS

	0.5 gal Start	6.0 Mid	12.0 End
Time	1045	1117	1141
pH	6.86	6.98	7.06
Conductivity (nmHOS)	.620	.630	.608
Temperature (celsius)	11	10.7	10.9

Total Volume Purged: 12 gallons

Sample Time: 1130 Sample No.: MW-25

Parameters: BTEX, DEHP

Comments: Greater than 5 well volumes was purged at MW-25

Signed/Sampler: Michelle C. Stensrud Date: 12/12/96

Signed/Reviewer: Michelle C. Stensrud Date: 12/12/96

n:/HUBBARD/MONTWELL.FOR

WESTERN

MONITORING WELL SAMPLING DATA FORM

Well No.: MW-4 Date: 12/12/96 Time: 1220

Boring Diameter: _____ Well Casing Diameter: _____

Annular Space Length: _____ Stickup: _____

COLUMN OF WATER IN WELL

Casing Length (feet):	20.10
DTW Top of Casing (feet):	4.19
Column of Water in Well (feet):	15.81

VOLUME TO BE REMOVED

Gallons per foot of casing:	0.167
Column of water length (feet):	15.81
Volume of casing (gallons):	2.529
Number of volumes to be evacuated:	3.0
Total volume to be evacuated (gallons):	7.5 gal

Method of Purging (pump, bailer, etc.): Bailer (Teflon)

FIELD ANALYSIS

	0.5 gal Start	2.5 Mid	7.5 End
Time	12:25	1240	1250
pH	6.49	6.79	6.86
Conductivity (nmHOS)	.550	.560	.560
Temperature (celsius)	7.7	8.2	8.2

Total Volume Purged: 7.5 gallons

Sample Time: 1300 Sample No.: MW-4

Parameters: BTEX, DEHP

Comments: _____

Signed/Sampler: Michelle C. Stensrud Date: 12/12/96

Signed/Reviewer: Michelle C. Stensrud Date: 12/12/96

n:/HUBBARD/MONTWELL.FOR

WESTERN

MONITORING WELL SAMPLING DATA FORM

Well No.: MW-14I Date: 12/12/96 Time: 1135

Boring Diameter: 4" Well Casing Diameter: 2"

Annular Space Length: _____ Stickup: _____

COLUMN OF WATER IN WELL

Casing Length (feet):	43.50
DTW Top of Casing (feet):	1.55
Column of Water in Well (feet):	41.95

VOLUME TO BE REMOVED

Gallons per foot of casing:	0.167
Column of water length (feet):	41.95
Volume of casing (gallons):	6.714
Number of volumes to be evacuated:	3.0
Total volume to be evacuated (gallons):	21 gal

Method of Purging (pump, bailer, etc.): Bailer (Teflon)

FIELD ANALYSIS

	3.0 gal Start	7.0 Mid	15.0 ~~End~~	21.0 END
Time	1140	1143	1155	1205
pH	7.58	7.54	7.98	7.75
Conductivity (nmHOS)	.208	.249	.279	.328
Temperature (celsius)	11.1	11.8	10.9	10.7

Total Volume Purged: 21 gallons

Sample Time: 1205 Sample No.: MW-14I

Parameters: BTEX, DEHP

Comments: _____

Signed/Sampler: Michelle L. Stensrud Date: 12/12/96

Signed/Reviewer: Michelle L. Stensrud Date: 12/12/96

APPENDIX D

GROUNDWATER DATA PACKAGE SUMMARY PAGES

ENVIROTECH RESEARCH, INC.

777 New Durham Road
Edison, New Jersey 08817
Tel: (908) 549-3900
Fax: (908) 549-3679

December 23, 1996

Roy F. Weston, Inc.
Raritan Plaza III, Suite 2B
101 Fieldcrest Ave.
Edison, NJ 08837-3616

Attention: Mr. John Wylock

Re: Job No. R526 - LE Carpenter

Dear Mr. Wylock:

Enclosed are the results you requested for the following sample(s) received at our laboratory on December 12, 1996:

Lab No.	Client ID	Analysis Required
71855	MW-15S	BTEX (GC), DEHP
71856	MW-15I	BTEX (GC), DEHP
71857	MW-15I-Dup	BTEX (GC), DEHP
71858	MW-22	BTEX (GC), DEHP
71859	MW-25	BTEX (GC), DEHP
71860	MW-14I	BTEX (GC), DEHP
71861	FB-01	BTEX (GC), DEHP
71862	MW-4	BTEX (GC), DEHP
71863	TB-01	BTEX (GC), DEHP
71864	MW-17S	BTEX (GC), DEHP

An invoice for our services is also enclosed. If you have any questions please contact your Project Manager, Kevin Hoogerhyde, at (908) 549-3900.

Very truly yours,

Michael J. Urban
Laboratory Manager

ENVIROTECH RESEARCH, INC.

Client ID: **MW-15S**
Site: LE Carpenter

Lab Sample No: **71855**
Lab Job No: R526

Date Sampled: 12-12-96
Date Received: 12-12-96
Date Extracted: 12-16-96
Date Analyzed: 12-17-96
GC Column: DB-5
Instrument ID: BNAMS3

Matrix: WATER
Level: LOW
Sample Volume: 930 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0
Lab File ID: t8324.d

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 625

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
bis(2-Ethylhexyl)phthalate	ND	1.2

Client ID: **MW-15S**
Site: LE Carpenter

Lab Sample No: 71855
Lab Job No: R526

Date Sampled: 12-12-96
Date Received: 12-12-96
Date Analyzed: 12-19-96
GC Column: DB624
Instrument ID: VOAGC3
Lab File ID: ipid2654.d

Matrix: WATER
Level: Low
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID
METHOD 602

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Benzene	ND	0.10
Toluene	ND	0.14
Ethylbenzene	0.21	0.14
Xylene (Total)	1.7	0.50

Client ID: **MW-15I**
Site: LE Carpenter

Lab Sample No: **71856**
Lab Job No: R526

Date Sampled: 12-12-96
Date Received: 12-12-96
Date Extracted: 12-16-96
Date Analyzed: 12-18-96
GC Column: DB-5
Instrument ID: BNAMS3

Matrix: WATER
Level: LOW
Sample Volume: 1000 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0
Lab File ID: t8325.d

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 625

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
bis(2-Ethylhexyl)phthalate	1.7	1.1

Client ID: **MW-15I**
Site: LE Carpenter

Lab Sample No: 71856
Lab Job No: R526

Date Sampled: 12-12-96
Date Received: 12-12-96
Date Analyzed: 12-19-96
GC Column: DB624
Instrument ID: VOAGC3
Lab File ID: ipid2655.d

Matrix: WATER
Level: Low
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID
METHOD 602

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Benzene	ND	0.10
Toluene	ND	0.14
Ethylbenzene	ND	0.14
Xylene (Total)	ND	0.50

Client ID: **MW-15I-Dup**
Site: LE Carpenter

Lab Sample No: **71857**
Lab Job No: R526

Date Sampled: 12-12-96
Date Received: 12-12-96
Date Extracted: 12-16-96
Date Analyzed: 12-18-96
GC Column: DB-5
Instrument ID: BNAMS3

Matrix: WATER
Level: LOW
Sample Volume: 990 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0
Lab File ID: t8326.d

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 625

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
bis(2-Ethylhexyl)phthalate	1.9	1.2

Client ID: MW-15I-Dup
Site: LE Carpenter

Lab Sample No: 71857
Lab Job No: R526

Date Sampled: 12-12-96
Date Received: 12-12-96
Date Analyzed: 12-19-96
GC Column: DB624
Instrument ID: VOAGC3
Lab File ID: ipid2656.d

Matrix: WATER
Level: Low
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID
METHOD 602

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Benzene	ND	0.10
Toluene	ND	0.14
Ethylbenzene	ND	0.14
Xylene (Total)	ND	0.50

Client ID: **MW-22**
Site: LE Carpenter

Lab Sample No: **71858**
Lab Job No: R526

Date Sampled: 12-12-96
Date Received: 12-12-96
Date Extracted: 12-16-96
Date Analyzed: 12-18-96
GC Column: DB-5
Instrument ID: BNAMS3

Matrix: WATER
Level: LOW
Sample Volume: 940 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0
Lab File ID: t8327.d

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 625

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
bis(2-Ethylhexyl)phthalate	ND	1.2

Client ID: MW-22
Site: LE Carpenter

Lab Sample No: 71858
Lab Job No: R526

Date Sampled: 12-12-96
Date Received: 12-12-96
Date Analyzed: 12-20-96
GC Column: DB624
Instrument ID: VOAGC3
Lab File ID: ipid2661.d

Matrix: WATER
Level: Low
Purge Volume: 5.0 ml
Dilution Factor: 50.0

VOLATILE ORGANICS - GC/PID
METHOD 602

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Benzene	ND	5.0
Toluene	ND	7.0
Ethylbenzene	320	7.0
Xylene (Total)	1330	25

Client ID: MW-25
Site: LE Carpenter

Lab Sample No: 71859
Lab Job No: R526

Date Sampled: 12-12-96
Date Received: 12-12-96
Date Extracted: 12-16-96
Date Analyzed: 12-18-96
GC Column: DB-5
Instrument ID: BNAMS3

Matrix: WATER
Level: LOW
Sample Volume: 850 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0
Lab File ID: t8328.d

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 625

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
bis(2-Ethylhexyl)phthalate	ND	1.3

Client ID: MW-25
Site: LE Carpenter

Lab Sample No: 71859
Lab Job No: R526

Date Sampled: 12-12-96
Date Received: 12-12-96
Date Analyzed: 12-19-96
GC Column: DB624
Instrument ID: VOAGC3
Lab File ID: ipid2657.d

Matrix: WATER
Level: Low
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID
METHOD 602

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Benzene	ND	0.10
Toluene	ND	0.14
Ethylbenzene	ND	0.14
Xylene (Total)	ND	0.50

Client ID: **MW-14I**
Site: LE Carpenter

Lab Sample No: **71860**
Lab Job No: R526

Date Sampled: 12-12-96
Date Received: 12-12-96
Date Extracted: 12-16-96
Date Analyzed: 12-18-96
GC Column: DB-5
Instrument ID: BNAMS3

Matrix: WATER
Level: LOW
Sample Volume: 990 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0
Lab File ID: t8329.d

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 625

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
bis(2-Ethylhexyl)phthalate	2.7	1.2

Client ID: **MW-14I**
Site: LE Carpenter

Lab Sample No: 71860
Lab Job No: R526

Date Sampled: 12-12-96
Date Received: 12-12-96
Date Analyzed: 12-19-96
GC Column: DB624
Instrument ID: VOAGC3
Lab File ID: ipid2658.d

Matrix: WATER
Level: Low
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID
METHOD 602

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Benzene	ND	0.10
Toluene	ND	0.14
Ethylbenzene	ND	0.14
Xylene (Total)	ND	0.50

Client ID: FB-01
Site: LE Carpenter

Lab Sample No: 71861
Lab Job No: R526

Date Sampled: 12-12-96
Date Received: 12-12-96
Date Extracted: 12-16-96
Date Analyzed: 12-18-96
GC Column: DB-5
Instrument ID: BNAMS3

Matrix: WATER
Level: LOW
Sample Volume: 940 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0
Lab File ID: t8330.d

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 625

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
bis(2-Ethylhexyl)phthalate	ND	1.2

Client ID: FB-01
Site: LE Carpenter

Lab Sample No: 71861
Lab Job No: R526

Date Sampled: 12-12-96
Date Received: 12-12-96
Date Analyzed: 12-16-96
GC Column: DB624
Instrument ID: VOAGC3
Lab File ID: ipid2601.d

Matrix: WATER
Level: Low
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID
METHOD 602

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Benzene	ND	0.10
Toluene	ND	0.14
Ethylbenzene	ND	0.14
Xylene (Total)	ND	0.50

Client ID: **MW-4**
Site: LE Carpenter

Lab Sample No: **71862**
Lab Job No: R526

Date Sampled: 12-12-96
Date Received: 12-12-96
Date Extracted: 12-16-96
Date Analyzed: 12-18-96
GC Column: DB-5
Instrument ID: BNAMS3

Matrix: WATER
Level: LOW
Sample Volume: 990 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 50.0
Lab File ID: t8339.d

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 625

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
bis(2-Ethylhexyl)phthalate	11000	58

Client ID: **MW-4**
Site: LE Carpenter

Lab Sample No: 71862
Lab Job No: R526

Date Sampled: 12-12-96
Date Received: 12-12-96
Date Analyzed: 12-20-96
GC Column: DB624
Instrument ID: VOAGC3
Lab File ID: ipid2659.d

Matrix: WATER
Level: Low
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID
METHOD 602

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Benzene	ND	0.10
Toluene	ND	0.14
Ethylbenzene	2.3	0.14
Xylene (Total)	ND	0.50

Client ID: **TB-01**
Site: LE Carpenter

Lab Sample No: 71863
Lab Job No: R526

Date Sampled: 12-12-96
Date Received: 12-12-96
Date Analyzed: 12-16-96
GC Column: DB624
Instrument ID: VOAGC3
Lab File ID: ipid2602.d

Matrix: WATER
Level: Low
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID
METHOD 602

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Benzene	ND	0.10
Toluene	ND	0.14
Ethylbenzene	ND	0.14
Xylene (Total)	ND	0.50

Client ID: **MW-17S**
Site: LE Carpenter

Lab Sample No: **71864**
Lab Job No: R526

Date Sampled: 12-12-96
Date Received: 12-12-96
Date Extracted: 12-16-96
Date Analyzed: 12-18-96
GC Column: DB-5
Instrument ID: BNAMS3

Matrix: WATER
Level: LOW
Sample Volume: 940 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0
Lab File ID: t8332.d

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 625

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
bis(2-Ethylhexyl)phthalate	1.5	1.2

Client ID: **MW-17S**
Site: LE Carpenter

Lab Sample No: 71864
Lab Job No: R526

Date Sampled: 12-12-96
Date Received: 12-12-96
Date Analyzed: 12-20-96
GC Column: DB624
Instrument ID: VOAGC3
Lab File ID: ipid2660.d

Matrix: WATER
Level: Low
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/PID
METHOD 602

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Benzene	ND	0.10
Toluene	ND	0.14
Ethylbenzene	ND	0.14
Xylene (Total)	ND	0.50

WESTON Analytics Use Only

Custody Transfer Record/Lab Work Request

WESTON

Page ____ of ____

Client LECARPENTER
Est. Final Proj. Sampling Date
Work Order # 06720-018-002
Project Contact/Phone # (914) 747-5210
AD Project Manager J. Wylock
QC ______ Del ______ TAT ______
Date Rec'd ______ Date Due ______
Account # ______

Refrigerator #				
#/Type Container	Liquid	Glass		Amber
	Solid			
Volume	Liquid	40ml		950ml
	Solid			
Preservatives				

ANALYSES REQUESTED → ORGANIC: VOA, BNA, Pest/PCB, Herb, DEHP; INORG: Metal, CN

WESTON Analytics Use Only — Job R526

MATRIX CODES:
S - Soil
SE - Sediment
SO - Solid
SL - Sludge
W - Water
O - Oil
A - Air
DS - Drum Solids
DL - Drum Liquids
L - EP/TCLP Leachate
WI - Wipe
X - Other
F - Fish

Lab ID	Client ID/Description	MS	MSD	Matrix	Date Collected	Time Collected	VOA	BNA	Pest/PCB	Herb	DEHP	Metal	CN	WESTON Analytics Use Only	
	MW 15S			W	12/12	905	X				X			718	55
	MW 15I			W	12/12	910	X				X			718	56
	MW 15I DUP			W	12/12	910	X				X			718	57
	MW22			W	12/12	1120	X				X			718	58
	MW25			W	12/12	1130	X				X			718	59
	MW14I			W	12/12	1205	X				X			718	60
	FB01			W	12/12	1230	X				X			718	61
	MW4			W	12/12	1300	X				X			718	62
	TB-01			W	12/12	1330	X							718	63
	MW-17S			W	12/12	950	X				X			718	64

FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS

Special Instructions:

DATE/REVISIONS:
______ 1. ______
______ 2. ______
______ 3. ______
______ 4. ______
______ 5. ______
______ 6. ______

WESTON Analytics Use Only

Samples were:
1) Shipped ___ or Hand Delivered ___
Airbill # ______
2) Ambient or Chilled
3) Received in Good Condition Y or N
4) Labels Indicate Properly Preserved Y or N
5) Received Within Holding Times Y or N

COC Tape was:
1) Present on Outer Package Y or N
2) Unbroken on Outer Package Y or N
3) Present on Sample Y or N
4) Unbroken on Sample Y or N
COC Record Present Upon Sample Rec't Y or N

Relinquished by	Received by	Date	Time
M. Stanford	H. Isley	12/12/96	1620

Relinquished by	Received by	Date	Time

Discrepancies Between Samples Labels and COC Record? Y or N
NOTES:

RFW 21-21-001/A-7/91 ___ L372 ___ L373 ___ L375 ___ L377 ___ L378 Ref# ______ Cooler# ______ 381-596a